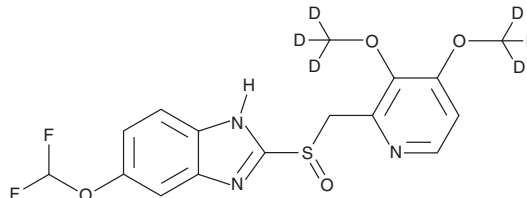


PRODUCT INFORMATION



Pantoprazole-d₆ Item No. 28483

CAS Registry No.: 922727-65-9
Formal Name: 6-(difluoromethoxy)-2-[[[3,4-di(methoxy-d₃)-2-pyridinyl]methyl]sulfinyl]-1H-benzimidazole
MF: C₁₆H₉D₆F₂N₃O₄S
FW: 389.4
Chemical Purity: ≥95% (Pantoprazole)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Pantoprazole-d₆ is intended for use as an internal standard for the quantification of pantoprazole (Item No. 21345) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Pantoprazole-d₆ is supplied as a solid. A stock solution may be made by dissolving the pantoprazole-d₆ in the solvent of choice, which should be purged with an inert gas. Pantoprazole-d₆ is soluble in DMSO.

Description

Pantoprazole is a proton pump inhibitor that inhibits H⁺/K⁺-ATPase activity in porcine gastric membrane vesicles with an IC₅₀ value of 6.8 μM.¹ It reduces basal gastric acid secretion in pylorus-ligated rats (ED₅₀ = 1.3 mg/kg) and inhibits mepirizole-induced increases in gastric acid secretion in an anesthetized rat model of gastric fistula (ED₅₀ = 0.8 mg/kg).² Pantoprazole inhibits formation of mepirizole-induced duodenal lesions in rats (ED₅₀ = 0.5 mg/kg). Formulations containing pantoprazole have been used in the treatment of gastroesophageal reflux disease (GERD) and hypersecretory conditions, including Zollinger-Ellison Syndrome.

References

1. Beil, W., Staar, U., and Sewing, K.F. Pantoprazole: A novel H⁺/K⁺-ATPase inhibitor with an improved pH stability. *Eur. J. Pharmacol.* **218(2-3)**, 265-271 (1992).
2. Takeuchi, K., Konaka, A., Nishijima, M., et al. Effects of pantoprazole, a novel H⁺/K⁺-ATPase inhibitor, on duodenal ulcerogenic and healing responses in rats: A comparative study with omeprazole and lansoprazole. *J. Gastroenterol. Hepatol.* **14(3)**, 251-257 (1999).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM